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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/903,701	07/13/2001	Michiyuki Terasawa	04329.2608	9165	
22852	7590 10/05/2004	10/05/2004		EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			EISEN, ALEXANDER		
			ART UNIT	PAPER NUMBER	
			2674		
			DATE MAILED: 10/05/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/903,701	TERASAWA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Alexander Eisen	2674			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication  If the period for reply specified above is less than thirty (30) days, a  If NO period for reply is specified above, the maximum statutory pe  Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	DN. R 1.136(a). In no event, however, may a reply be tir r a reply within the statutory minimum of thirty (30) day riod will apply and will expire SIX (6) MONTHS from atute, cause the application to become ABANDONE	mely filed  /s will be considered timely.  I the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>21 January 2003</u> .					
2a) This action is <b>FINAL</b> . 2b) ⊠ <sup>-</sup>	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ⊠ Claim(s) 1-16 is/are pending in the applicate 4a) Of the above claim(s) 1-13 is/are withdrest 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 14-16 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction are	awn from consideration.				
Application Papers					
9) The specification is objected to by the Exam 10) The drawing(s) filed on 13 July 2001 is/are:  Applicant may not request that any objection to  Replacement drawing sheet(s) including the con 11) The oath or declaration is objected to by the	a)⊠ accepted or b)⊡ objected to be the drawing(s) be held in abeyance. See rection is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. Tents have been received in Application of the priority documents have been received reau (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) 🔀 Interview Summary	4) Interview Summary (PTO-413)			
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date 07/14/2001.</li> </ol>		ate atent Application (PTO-152)			

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### DETAILED ACTION

## Election/Restrictions

1. During a telephone conversation with Frank Italiano on 21 January 2001 a provisional election was made without traverse to prosecute the invention of group IV, claims 14-16.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

# **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newman et al, ("Newman"), US 5,305,244 (reference provided with applicant's IDS) in view of Carlson et al., ("Carlson"), US 5,923,487.

With respect to claim 14 Newman discloses a computer system comprising a computer body 106 attachable to a user's body including a memory device 519 (col. 5, lines 19-27; col. 9, lines 1-20) having a movable part and stored with operating system.

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Newman does not disclose that the computer system further comprises a vibration detecting element for detecting a vibration of the computer body, a discriminating element for determining whether or not the computer body is moving, in accordance with a pattern detected by means of the vibration detecting element, and a main control element configured to stop the operation of the memory device when it is concluded by the discriminating element that the computer body is moving.

Carlson brings attention to a vulnerability of memory devices having a movable part, such as hard disk drive used by Newman, to physical shocks or undesirable vibrations (col. 1, lines 13-55), wherein sensors are used to detect these movement and based on the comparison of the output signals from the sensors to a predetermined threshold value determination by discriminating element 56 is made whether or not the device is moving and the operation of the disk drive is halted.

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to employ the technique described by Carlson in the wearable computer system of Newman, because it would protect the hard drive and prevent an erroneous writing operations (Carlson; col. 1, lines 19-25; col. 2, lines 28-51).

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman in view of Carlson, as applied to claim 14 above, and further in view of Tokico Ltd, JP 04-221478.

Newman discloses a computer system comprising a computer body 106 attachable to a user's body including a memory device having a movable part and stored with operating system.

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Carlson teaches a memory device, wherein sensors are used to detect the movement of a system and based on the comparison of the output signals from the sensors to a predetermined threshold value determination is made whether or not the device is moving and the operation of the disk drive is halted.

None of the above teaches a head actuator moving and positioning the head between an information processing position and a retreated position off the record media when the discriminating element concludes that the computer body is moving.

Tokico Ltd teaches retreating of a magnetic head of a magnetic disk apparatus when an external impact is applied to the housing of the apparatus, the impact detected by provided vibration sensor 12.

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to provide the computer system of Newman-Carlson with ability of Tokico Ltd in order to further protect the magnetic disk from damage.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Emo et al., US 6,472,864 B1, discloses a vibration sensor for detecting shocks and vibrations to a magnetic disk for preventing invalid operation of a hard drive.

Stupeck et al., US 4,786,995, discloses an automatic head retract system for disk drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (703) 306-2988. The examiner can normally be reached on M-F (8:30-4:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

road &

Alexander Eisen Primary Examiner Art Unit 2674

29 September 2004